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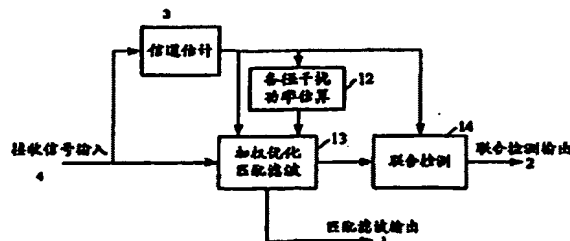
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(54) Title: METHOD FOR DETECTING THE ORTHOGONAL CODE CDMA SIGNAL

(54) 发明名称: 正交码CDMA信号检测方法



- 1 MATCHED FILTERING'S OUTPUT
- 2 COMBINED DETECT'S OUTPUT
- 3 CHANNEL ESTIMATION
- 4 RECEIVED SIGNAL'S INPUT
- 12 EACH MULTIPATH DISTURB POWER'S ESTIMATION
- 13 WEIGHTING OPTIMIZED MATCHED FILTERING
- 14 COMBINED DETECTION

(57) Abstract: The present invention discloses a method for detecting the orthogonal code CDMA signal. It mainly includes: estimating the main power of each multipath signal and performing max proportion combination by using the power of each multipath signal's disturber, in order to get optimized matched filtering output; and united detecting the optimized matched filtering output. It may be two implement: when using the detect implement of optimized matched filtering, it only needs to perform the first two main steps; when using the united detecting implement, it needs to perform all the three steps. For the two implements estimate the main power of each multipath signal's disturber, it needs to select the disturb code's channel which join to estimation, namely select all the code's channel of this subzone or the code's channel of this subzone which not perform united detection. As a result of using the orthogonal code characteristic and channel estimation, improve the system's performance by small cost. It can be especially used in the device of orthogonal code CDMA system.

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